

WHAT IS CLAIMED IS:

1. A center-electrode assembly comprising:

a ferrite;

center-electrode patterns and insulating films deposited on the top surface of the ferrite;

a conductive pattern formed on the bottom surface of the ferrite; and

5 connecting electrodes formed at margins of the ferrite electrically connecting between the center-electrode patterns deposited on the top surface and the conductive pattern formed on the bottom surface.

2. A nonreciprocal circuit device comprising:

a permanent magnet;

a center-electrode assembly according to Claim 1 to which a direct-current magnetic field is applied by the permanent magnet; and

5 a metallic case accommodating the permanent magnet and the center-electrode assembly.

3. A communication apparatus comprising a nonreciprocal circuit device according to

Claim 2, and connected thereto, at least one of a transmitting circuit and a reception circuit.

4. A communication apparatus comprising a center-electrode assembly according to Claim 1, and connected thereto, at least one of a transmission circuit and a reception circuit.

5. A method for manufacturing a center-electrode assembly comprising the steps of:
forming through-holes in a ferrite mother board;
alternately depositing a center-electrode pattern and an insulating film on the top surface
of the ferrite mother board, and forming a conductive pattern on the back surface of the ferrite
mother board; and
cutting a center-electrode assembly from the ferrite mother board by cutting the ferrite
mother board at intervals of a predetermined size, the center-electrode patterns formed on the top
surface and the conductive pattern formed on the back surface being electrically connected via
connecting electrodes formed in the through-holes in the center-electrode assembly.

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